

=> d his

(FILE 'HOME' ENTERED AT 09:52:53 ON 20 MAY 2004)

FILE 'REGISTRY' ENTERED AT 09:53:04 ON 20 MAY 2004

L1 5 S 115-39-9 OR 18472-87-2 OR 632-69-9 OR 573-58-0 OR 587-98-4
SEL NAME L1

FILE 'CA' ENTERED AT 10:00:50 ON 20 MAY 2004

L2 13521 S L1 OR TETRABROMOPHENOLSULFOPHTHALEIN OR BROMOPHENOL BLUE OR
CONGORED OR DIRECT RED OR COTTON RED OR METANIL YELLOW OR ROSE
BENGAL OR TETRAIODOTETRACHLOROFLUORESCIN OR PHLOXIN# OR PHYLOXINE
OR (BENZENESULFONIC ACID OR NAPHTHALENESULFONIC ACID) (6A) (AZO OR
BISAZO OR DIAZI)

L3 482 S L2 AND (FOOD OR SPOIL? OR DECOMPOS? OR DEGRAD? OR BACTERIA? OR
AMMONIA OR AMINE) (5A) (DETECT? OR DETERMIN? OR MEASUR? OR MONITOR?
OR ASSAY? OR ANALY? OR ASSES? OR CHECK? OR ESTIMAT? OR EVALUAT? OR
EXAMIN? OR SCREEN OR SENSE# OR SENSING OR SENSOR OR TEST? OR
PROBE# OR PROBING OR IDENTIF?)

L4 18 S L2 AND (FOOD OR SPOIL? OR DECOMPOS? OR DEGRAD? OR BACTERIA? OR
AMMONIA OR AMINE) (5A) (QUANTIF? OR QUANTITAT?)

L5 7638 S (FOOD OR SPOIL? OR DECOMPOS? OR DEGRAD? OR BACTERIA? OR AMMONIA
OR AMINE) (5A) (QUANTIF? OR QUANTITAT?)

L6 208381 S (FOOD OR SPOIL? OR DECOMPOS? OR DEGRAD? OR BACTERIA? OR AMMONIA
OR AMINE) (5A) (DETECT? OR DETERMIN? OR MEASUR? OR MONITOR? OR
ASSAY? OR ANALY? OR ASSES? OR CHECK? OR ESTIMAT? OR EVALUAT? OR
EXAMIN? OR SCREEN OR SENSE# OR SENSING OR SENSOR OR TEST? OR
PROBE# OR PROBING OR IDENTIF?)

L7 2633 S L5-6 AND (SUBZERO OR FREEZ? OR FROZE?)

L8 488 S L3-4 AND L5-6

L9 8 S L7 AND L8

L10 6 S L8 AND (SHELF LIFE OR SHEFLIFE)

L11 229 S L7 AND (INDICATOR OR DYE OR PIGMENT OR COLORIMET?)

L12 36 S L8 AND (FOOD OR SPOIL? OR DECOMPOS? OR DEGRAD? OR
BACTERIA?) AND (AMMONIA OR AMINE OR NH3)

L13 167 S L11 AND (FOOD OR FRESHNESS OR QUALITY)

L14 109 S L13 NOT (EXTRACT? OR CHROMATOG? OR FLOW INJECT?)

L15 58 S L13 NOT L14

L16 2 S L15 AND TEST STRIP

L17 79 S (L14 NOT PY>1997) OR (L14 AND PATENT/DT AND PY<1999)

L18 127 S L9-10, L12, L16-17

=> d bib, ab 1-127 118

L18 ANSWER 14 OF 127 CA COPYRIGHT 2004 ACS on STN

AN 130:152845 CA

TI **Food** quality indicator device to **detect** volatile **amines**

IN Miller, Dwight W.; Wilkes, Jon G.; Conte, Eric D.

PA United States Dept. of Health and Human Services, USA

SO PCT Int. Appl., 28 pp.

PI WO 9904256 A1 19990128

WO 1998-US14780 19980716

PRAI US 1997-52674P P 19970716

US 1998-116152 B1 19980716

AB A **food** quality indicator device comprises an indicator compd. on a substrate and the indicator compd. changes color due to the presence of volatile compds., such as volatile bases, in **spoiled food**, even when the **food** is **frozen**. The indicator compd. may also **detect** the presence of an unwanted **amine**-producing biol. agent, such as **bacteria** or fungi. The indicator compd. is typically contained within a polymeric matrix disposed on the substrate. Examples of suitable indicator compds. include halogenated azo dyes, sulfonated xanthene dyes, and sulfonated hydroxy-functional triphenylmethane dyes. Thus, **bromophenol blue** may be used to **detect amines** from **spoiled** cod.

L18 ANSWER 51 OF 127 CA COPYRIGHT 2004 ACS on STN

AN 111:38117 CA

TI **Degradation** of seven **food** dyes by some pathogenic and non-pathogenic intestinal microflora

AU Ghosh, D. K.; Chaudhuri, J.; Mandal, A.

CS Dep. Biochem., Univ. Coll. Sci., Calcutta, 700 019, India

SO Microbios Letters (1988), 39(154), 81-5

AB Transformation of 7 azo dyes (amaranth, sunset yellow, orange II, orange B, ponceau SX, fast red E, and **metanil yellow**) by some pathogenic and nonpathogenic intestinal **bacteria** was studied. The test organisms included Escherichia coli, Klebsiella aerogenes, Proteus vulgaris, and enteropathogens like Shigella dysenteriae (type 1), Shigella flexneri (type 2), and Salmonella typhi. The microflora reduced the azo bond of the dyes and converted them to corresponding **amines**. These azo dyes were also utilized by the **test bacteria** as sole sources of C and N, indicating further **degrdn.** of the dye mols.

L18 ANSWER 71 OF 127 CA COPYRIGHT 2004 ACS on STN

AN 94:173172 CA

TI Monitoring the history of temperature versus time of a deep-**frozen** product, **indicator** for applying this process and utilization of these processes

IN Allmendinger, Thomas

PA Switz.

SO PCT Int. Appl., 26 pp.

PI WO 8100303 A1 19810205 WO 1980-CH85 19800711 <--

PRAI CH 1979-6535 19790713

AB An **indicator** is devised to monitor the time-temp. history of a **food** or other product in **frozen** storage. The device consists of a strip of paper or other absorptive material sealed in a plastic membrane. The strip is impregnated with citric acid [77-92-9], NaCl, or similar compd., and lies on an acid-base **indicator** strip, e.g. litmus paper. Optionally, diammonium citrate [3012-65-5] is added to the absorptive strip if needed to activate the acid-base **indicator**. One end of the absorptive strip is brought into contact with water or viscous sugar soln. and placed in the deep **freeze** compartment with the product to be monitored. A color change gradually spreads from 1 end of the acid-base **indicator** strip to the other at a rate which indicates storage time or temp. changes.

L18 ANSWER 90 OF 127 CA COPYRIGHT 2004 ACS on STN
 AN 75:47646 CA
 TI Device for indicating the desirability of **food** for consumption
 PA Aktiebolag Ryforsan
 SO Fr., 10 pp.
 PI FR 2038030 19701231 <--
 US 3751382 19730000 US <--
 PRAI SE 19690313
 AB The suitability of **food** for consumption is **detd.** by a procedure and device which eliminates the difficulties occurring e.g. with packed **frozen** articles showing no visible changes. The procedure is based on the fact that biocatalytic processes depend on the temp., stopping below a certain temp. (e.g. -18°), and showing a max. at 37-40°. An enzyme and its substrate (e.g. urease and urea) are mixed in the **frozen** state and stored under conditions identical to those of the **food** under study. The amt. of substrate degraded (e.g. amt. of NH₃ formed) during the storage period is **detd.** as a **measure** of **degradative** processes occurring in the **food**.

L18 ANSWER 119 OF 127 CA COPYRIGHT 2004 ACS on STN
 AN 46:51598 CA
 OREF 46:8573f-h
 TI Indicator **measurements** with **amines** in anisole and chlorobenzene solution
 AU Bell, R. P.; Bayles, J. W.
 CS Phys. Chem. Lab., Oxford, UK
 SO Journal of the Chemical Society, Abstracts (1952) 1518-24
 AB The basic strengths of BuNH₂, Bu₂NH, Bu₃N, aniline, N-methylaniline, N,N-dimethylaniline, N-ethylaniline, N,N-diethylaniline, o-toluidine, N-methyl-o-toluidine, N,N-dimethyl-o-toluidine, N-ethyl-o-toluidine, p-toluidine, N-methyl-p-toluidine, N,N-dimethyl-p-toluidine, N-ethyl-p-toluidine, quinoline, isoquinoline, pyridine, o-chloroaniline, and m-chloroaniline have been compared in anisole and chlorobenzene solns. by measuring their equilibria with 2,6-dinitrophenol (I) and **bromophenol blue** (II). Dry solns. of the indicators are colorless, but a yellow color is produced on addn. of **amine**. With a large excess of base a const. absorption, measured at 4047 Å., was produced. II was not used for strong aliphatic **amines** because of the red or purple color that developed. I was not used for aromatic **amines** because of the formation of a brown color in some cases. The values of basic strength provide a more rational account of the effect of alkyl substitution than the dissocn. const. in H₂O. The anomalies in H₂O are due largely to H-bonding with the solvent. The indicator const. for **amines** in anisole bear a close relation to their catalytic const. in the **decompn.** of nitramide in the same solvent (cf. Bell and Trotman-Dickenson, C.A. 44, 8828d).

=> log y

STN INTERNATIONAL LOGOFF AT 10:45:38 ON 20 MAY 2004